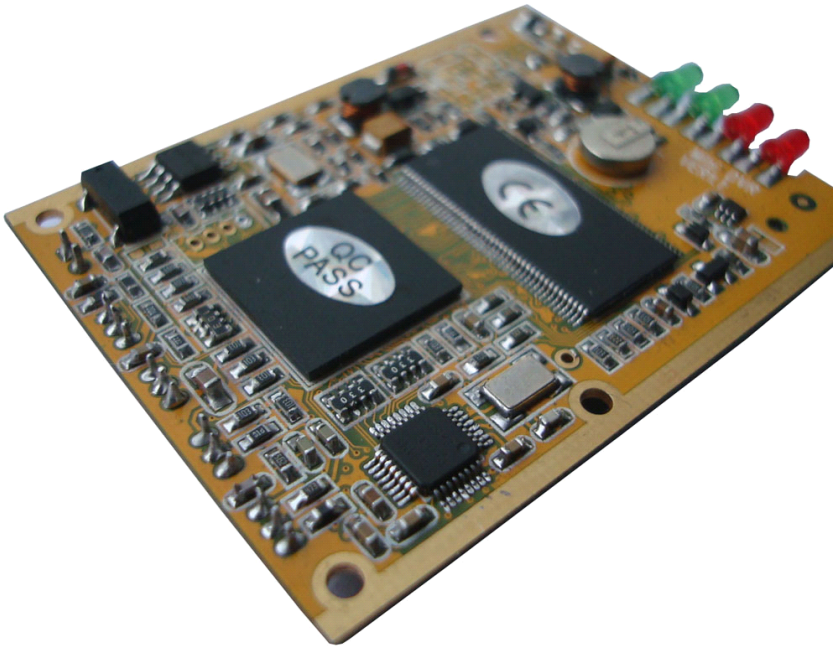
1CH Mini HD DVR PCB Board



Description:

SD card video recorder board is a high-performance, high-definition digital video recorder; board is 60*45mm. It adapts MPEG-4 video compression, and single channel resolution up to D1(704*576), 30fps, is a fully real-time, high-definition, low power consumption, easy-operated, super-smart professional DVR.
It supports power-up record, motion detect record, scheduled record, and manual record, SD card up to 32GB expandable, and directly playback by TV sets, monitor, and PC by SD card reader.

Features:

1. MPEG-4 video compression
2. D1(704*576) resolution
3. MPEG-4/ASF video format, MP3 audio format
4. Real-time stamp on videos, overwrite
5. Manual/motion detect/scheduled/power-up record
6. audio input, audio compression 8KHZ/ADPCM
7. 5/15/30fps optional
8. SDHC memory support, up to 32GB
9. TV-out enables better resolution by TV set
10. MPEG-4/ASF playback
11. AV-IN, AV-OUT directly connect with camera, TV, monitor
12. Support IR remote operation, built-in ADC for external keyboards
13. Support manually snapshot, auto record by triggering port

14. Built-in RS232 series port, enables external remote, keyboard for operation and software set-up
15. 5-35V for wide power supply use
16. Low power-consumption, 1W when standby, 2W when recording
17. Electronic dog ensures normal working
18. Board dimension: 60*45mm, net weight 100g, with position holes for different expandable use

Board application:

The board supports wide voltage input, suitable for all vehicles use; SD card for storage avoid vehicle shock; resolution D1/VGA/QVGA and frames 5/15/30fps optional for different requirements in different conditions.

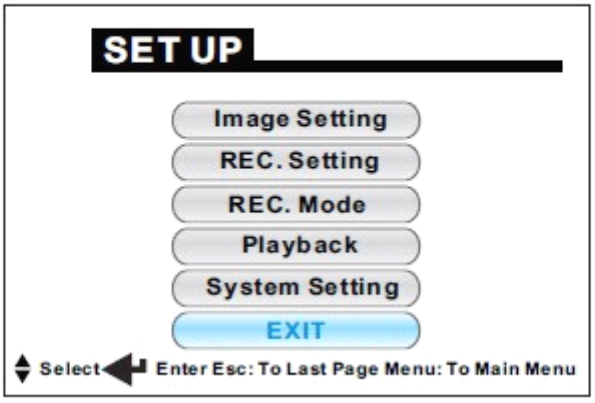
Remote instruction:

Key	Function
▲	Up/Volume up
▼	Down/Volume down
◀	Left/Fast forward
▶	Right/Fast reverse
OK	OK/Record
MENU	Menu
P/P	Play/Pause/Delete files
STOP	Stop recording/Stop playback
ESC	ESC/Playback

Menu set up:

Set up

Press “Menu” on keyboard to enter the following screen.

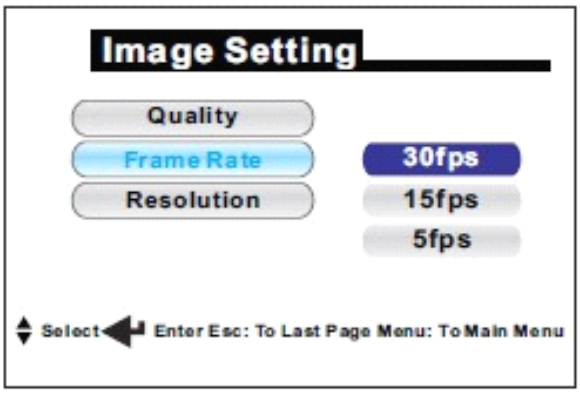


I. Image setting

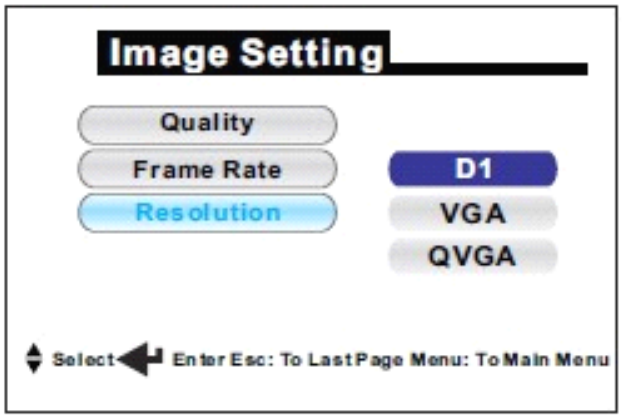
Press “OK” to enter image setting to set image quality/ frame rate/resolution.

1. Press “OK” to enter image quality function, can set to be three types: High /medium /low

2. Press “OK” to set the frame: 30f/s, 15f/s or 5f/s. when you select 30f/s, the recorded video is real time.

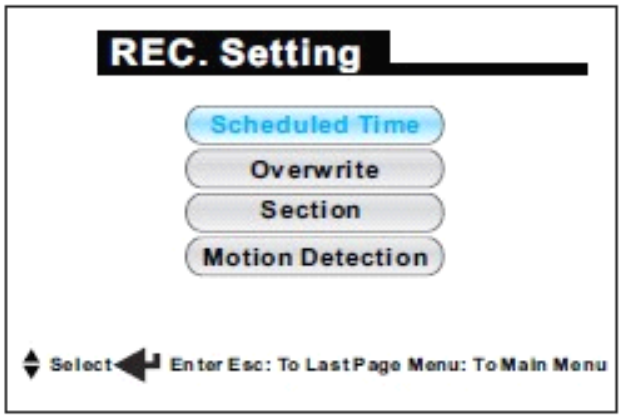


3. Press "OK" to set the resolution: D1/ VGA/ QVGA. The D1 video quality is better than VGA, VGA is better than QVGA.

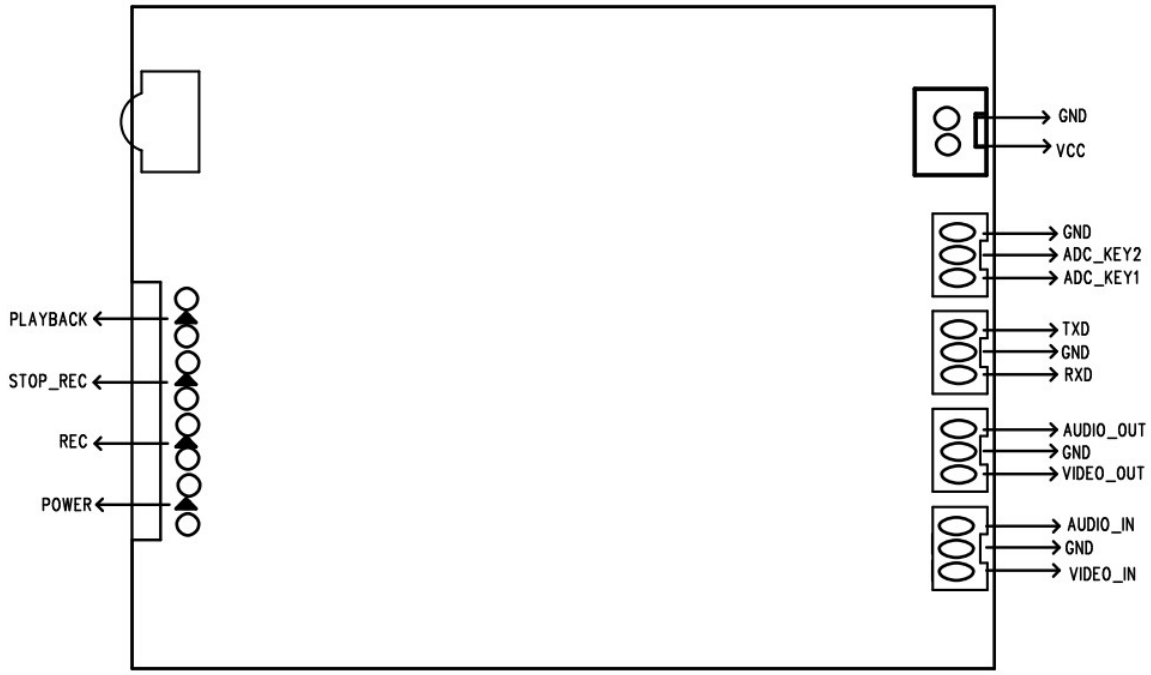


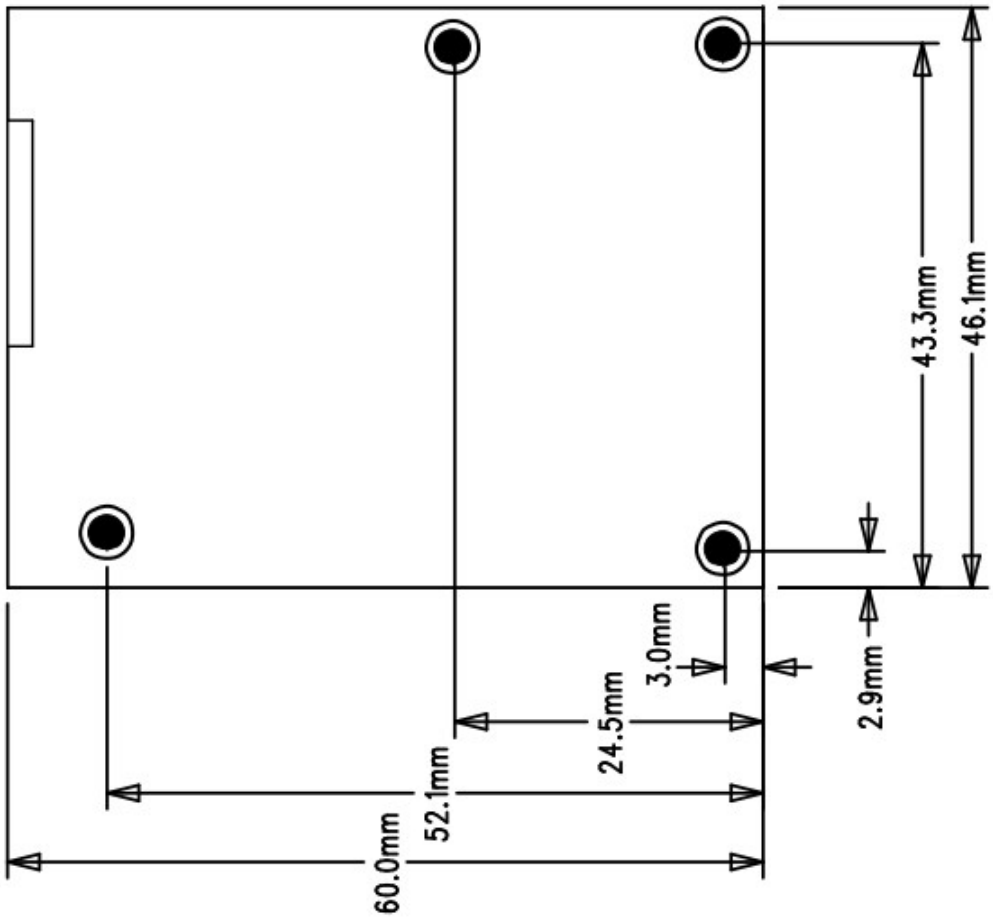
II. Recording Setting

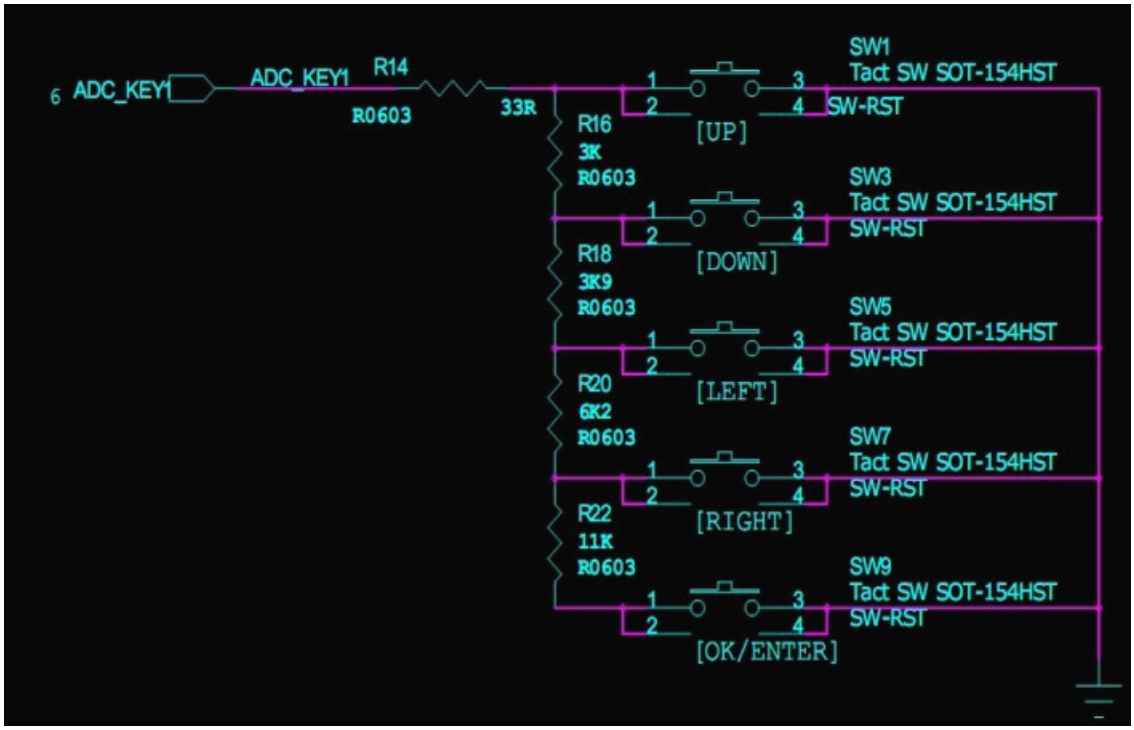
Press "OK" to enter recording setting, can set Scheduled time/ Overwrite/ Section/ Motion detection.

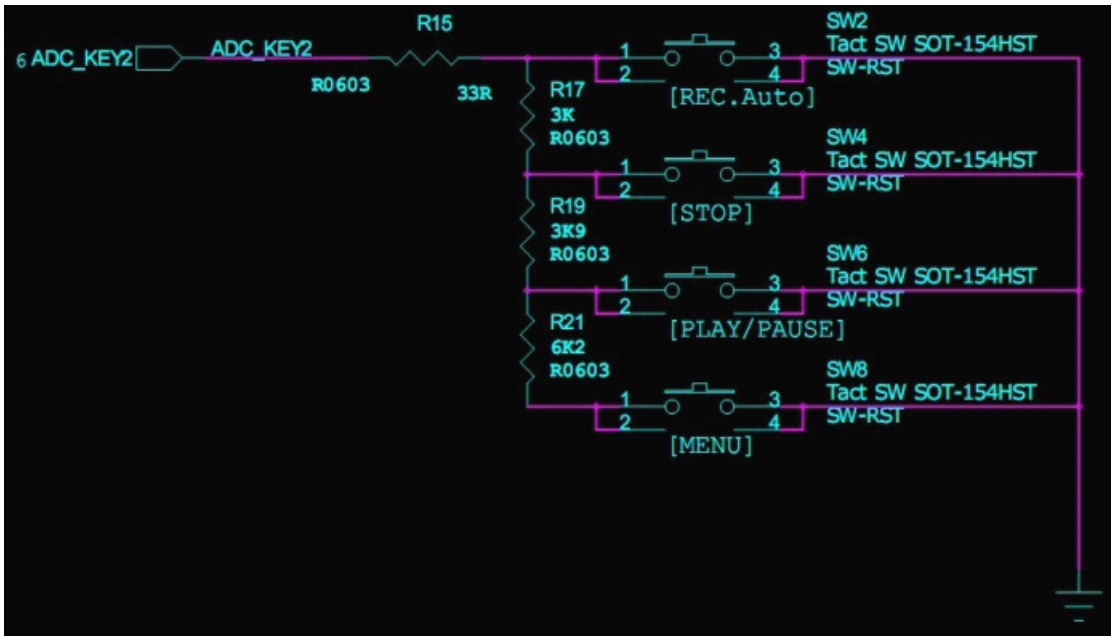


Expand and interface instruction:


PLAYBACK
STOP_REC
REC
POWER
GND
VCC
GND
ADC_KEY2
ADC_KEY1
TXD
GND
RXD
AUDIO_OUT
GND
VIDEO_OUT
AUDIO_IN
GND
VIDEO_IN


43.3mm
46.1mm
2.9mm
3.0mm
24.5mm
52.1mm
60.0mm


6 ADC_KEY1
ADC_KEY1
R14
R0603
33R
R16
3K
R0603
R18
3K9
R0603
R20
6K2
R0603
R22
11K
R0603
SW1
Tact SW SOT-154HST
SW-RST
[UP]
SW3
Tact SW SOT-154HST
SW-RST
[DOWN]
SW5
Tact SW SOT-154HST
SW-RST
[LEFT]
SW7
Tact SW SOT-154HST
SW-RST
[RIGHT]
SW9
Tact SW SOT-154HST
SW-RST
[OK/ENTER]


6 ADC_KEY2
ADC_KEY2
R15
R0603
33R
R17
3K
R0603
R19
3K9
R0603
R21
6K2
R0603
SW2
Tact SW SOT-154HST
SW-RST
[REC.Auto]
SW4
Tact SW SOT-154HST
SW-RST
[STOP]
SW6
Tact SW SOT-154HST
SW-RST
[PLAY/PAUSE]
SW8
Tact SW SOT-154HST
SW-RST
[MENU]

Specifications:

Item	System	Data
System	Language	Simplified/Traditional Chinese, English
	Interface	OSD Menu
Video	Video input	Single channel video input
	Video output	Single channel video output
	TV Standard	PAL/NTSC
	Video compression	MPEG-4，30fps @ D1: 704*576 PAL
Audio	Audio input	Single channel audio input
	Audio output	Single channel audio output
	Audio mode	Simultaneous Recording
Image & storage	Image format	QVGA/VGA/D1 for selection
	Video bit rate	3 image levels and 3 frame rates for selection
	Audio bit rate	8KB/s
	Storage	Supports up to 32GB SD Card
Alarm	It auto record when grounding the point(alarm_in) and stop recording when undo, one key trigger recording	
Communication Interface	RS232	Supports 1XRS232(built-in)
Playback software	Playback analysis	Playback on system via monitor/PC
Software update	Update via SD card	

Item	Data	Description
Power input	5-30V	Power input: ＋5V～＋30V
Power output	12V	Power output: 12V(+/-0.2V) @ 1A(max)
Video output resistant	75Ω	75Ω for each channel output
Video output voltage	1Vp-p	Output a 1Vp-p CVBS analog signal, showing that device resistant input should match 75Ω
SD slot	1XSD card	1. Compatible with high street brands, 32GB max
		2. SD card for image storage and software update
Working temperature	-20℃～+70℃	Under well-ventilated condition